UNCLASSIFIED

A	n		
A	V _		

DEFENSE DOCUMENTATION CENTER

FOR

SCIENTIFIC AND TECHNICAL INFORMATION

CAMERON STATION ALEXANDRIA, VIRGINIA

DOWNGRADED AT 3 YEAR INTERVALS: DECLASSIFIED AFTER 12 YEARS DOD DIR 5200 10



UNCLASSIFIED

THIS REPORT HAS BEEN DECLASSIFIED AND CLEARED FOR PUBLIC RELEASE.

DISTRIBUTION A APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

ARCTIC INSTITUTE OF WORTH AMERICA

RESEARCH PROJECTS SUPPORTED BY CONTRACTUAL ARRANGEMENT BETWEEN OFFICE OF NAVAL RESEARCH AND ARCTIC INSTITUTE OF WORTH AMERICA.

CONTRACTS N7onr-367 and Nonr-342-00

FIFTH SEMIANNUAL PROGRESS REPORT.

1 January - 30 June 1952

ARCTIC INSTITUTE OF MORTH AMERICA

RESEARCH PROJECTS SUPPORTED BY CONTRACTUAL ARRANGEMENT BETWEEN OFFICE OF NAVAL RESEARCH AND ARCTIC INSTITUTE OF WORTH AMERICA.

CONTRACTS N7onr-367 and Nonr-342-00

FIFTH SEMIANNUAL PROGRESS REPORT.

1 January - 30 June 1952

Preface

Contract M7onr-367, Task Order I Projects:

```
OMR - #1
                 Belcher, Donald J.
      #2
                 Hemstock, R. A.
      #3
                 Kranck, E. H.
      #4
                 Harper, Francis
      *5
                 Hovanitz, William
                 Quick, Horace F.
      #7
                 Wilber, Charles G.
      *8
                 Newell, Irvin M.
      ¥9, 27
                 Hamilton, Rodgers D.
      10 -Cancelled-
      11
                 Larsen, Helge
      12 -Cambelled-
     #13, 20
                 Giddings, J. L. Jr.
     14
                 Raup, Hugh M.
     *15
                 Marr, J. W.
    #16
                 Hammer, Marie
    *17
                 Wing, Leonard W.
     #18, 25
                 Cooper, Wm. S. and Spetzman, Lloyd A.
     19, 52
                 Harp, Elmer Jr.
    #20
                 (see OMR-13)
    #21, 48 .
                 de Laguna, Frederica
    #22
                 Laughlin, William S.
      23 -Cancelled-
     24
                 Bertram, G. C. L.
    #25
                 (see OMR-18)
     26
                 Mclund, Carl R.
    #27
                 (see OMR-9)
    #28
                 Hanson, Herbert C.
     29
                 Krogerus, Harry V.
     30
                 Lindroth, Carl H.
    #31
                 Llano, George A.
    *32,
         57
                 Musacchia, Xavier J.
     33
                 Palmen, Ernst P.
      34
                 Queneau, Paul and Scott, Peter M. and Hanson,
      35
                 Tuomikeski, Risto
                                                            Harold C.
    #36
                 Weber, Neal A.
     37
                 Shimkin, Demitri B.
    #38
                 McMair, Andrew H. and Wales, Donald B.
    #39
                 Miller, Maynard M.
    *ho, 58
                 Mutt, David C.
                 Sanderson, Marie
    +41
     42
                 Brown, Malcolm
     43
                 Baird, Patrick D.
     44
                 Benson, Lyman D.
    #45
                 Buss, Irven O.
    =16
                 Cade, T. J.
    ¥47
                 Carpenter, Edmund S.
    #16
                 (see ONR-21)
```

^{*} Completed Project

Contract N7onr-367, Task Order I Projects: (Con't.)

```
OHR-
      49
                  Hammerich, Louis L.
      50
                  Hansen, Henry P.
     #51
52
53
                  Hanson, Herbert C.
                  (see ONR-19)
                  Host, Per
                  Jordal, Louis H.
     #55
56
#57
                  Kenk, Roman
                  Lawrence, Donald B.
                  (see ONR-32)
     458
                  (see ONR-40)
     #59
                  Oswalt, Wendell H.
     #60
                  Scott, Robert F.
     #61
                  Sullivan, Bernard J.
     #62
                  Thompson, Dorothy Jean T.
     #63
                  Thomson, John W. Jr.
                  Wilber, Charles G.
     #6lı
      65
66
                  Gustafson, Felix G.
                  Osborn, Dale J.
      67
                  Stone, Kirk H.
      68
                  Campbell, John D.
      69
                  O'Bryan, Deric
      70
                  Irving, William
      71
                  Rousseau, Jacques
      72
                  Croasdale, Hannah T.
      73
                  Troelsen, Johannes C.
      74
         -Cancelled-
      75
76
                  Cooch, F. Graham
                  Dehnel, Paul A.
      77
                  Fay, Francis H.
      78
                  Findlay, Marjorie C.
      79
                  Hansen, Henry P.
      80
                  Huckett, Hugh C.
      81
                  Humphrey, Philip S.
      82
                  Laughlin, William S.
      83
                  Lepage, Ernest
      84
         -Cancelled-
      85
86
                  Lucier, Charles V.
                  Miller, Maynard M.
      87
                  Moir, David R.
      88
                  Van Stone, James W.
      89
                  Sharp, Robert P.
```

Contract M7onr-367, Task Order II Projects:

```
OMR- T.O. 2a Arctic Institute (Tremaine, Marie)
#T.O. 2b Arctic Institute (Smith, Dudley)
```

Contract Nonr-342-00 (David C. Nutt)

Index

^{*} Completed project.

PREFACE

This Semiannual Progress Report summarizes the status of all Arctic Institute-ONR Projects during the pariod 1 January - 30 June 1952. References to publications and reports, resulting from projects listed as completed in the last Semiannual Progress Report appearing since the last report, are included even though the projects themselves are no longer current.

The following projects have been completed during the period 1 January - 30 June 1952:

Contract N7onr-367, Task Order I:

OMR-13, 20 (Dr. J. L. Giddings, Jr.)

The Extension of the Tree-ring Chronology in Alaska ty Further Excavation so as to Date the Early Phases of Eskimo Culture in the Bering Strait Region.

ONR-16 (Dr. Marie Hammer) A Study of the Microfauns of Arctic Shore Areas (Coppermine and Hudson Bay, Canada).

OMR-21, 48 (Dr. Frederica deLaguna)

An Ethnological-Archaeological Study of the Development of Tlingit Custure in Southeastern Alaska.

OMR-32, 57 (Dr. Xavier J. Musacchia)

A Study of the Carbohydrates and Lipids of the Invertebrates and Vertebrates of the Point Barrow Region, Alaska.

OMR-47 (Dr. Edwund S. Carpenter)

Archaeological, Geological, and Ethnological Investigations at Southampton Island, Northwest Territories, Canada.

OMR-51 (Dr. Herbert C. Hanson) A Study of the Phytogeography, Location, and Condition of Reindeer Range and of the Management of Reindeer in Western Alaska.

OHR-59 (Wendell H. Oswalt)

An Archaeological Survey from the South Mouth of the Yukon River, Alaska, to Hazen Ray, with the Excavation of the Most Promising Site Located by this Survey.

Contract N7onr-367, Task Order I: (Con't.)

OMR-60 (Robert F. Scott) An Aerial Survey of Dall Sheep in Alaska to Determine Limits of Range, and Present Distribution and Abundance.

ONR-62 (Dorothy J. T. Thompson)

A Study of the Social and Economic Organisation in a Northern Market Town (Nome, Alaska) with Emphasis on the Position of the Eskimo.

OMR-63 (Dr. John W. Thomson, Jr.) A Study of the Lichensof the West Coast of Hudson Bay, Their Ecology, Distribution and Abundance.

Details concerning the completion of the above projects are included in the present Semiannual Progress Report. They will be automatically dropped in the next Report, except for mention of any pertinent publications and reports that have appeared in the interim.

CONTRACT M7onr-367, TASK ORDER I

A Study of the Ethnological and Physical Anthropologies of Eskimos in the region between Norton Sound and the

Alaskan Peninsula.

Investigator:

Dr. Helge Larsen Etnografisk Samling Nationalmuseet 10 Ny Vestergade Kobenhavn, Denmark

Amount

from AINA:

\$2610.

Date initiated:

1948.

Anticipated

completion date: Spring 1953.

Status:

Technical report is in process of preparation.

Project: ONR-13, 20

The Extension of the Tree-ring Chronology in Alaska by further excavation so as to Date the Early Phases of Eskimo Culture in the Bering Strait Area.

Investigator:

Dr. J. L. Giddings, Jr.
The University Museum
University of Pennsylvania
Philadelphia 4, Pennsylvania

Amount
from AINA:

\$2610. (ONR-13) \$2500. (ONR-20)

Date initiated:

1948 (ONR-13) 1949 (ONR-20)

Status:

Completed.

The following publications have appeared in addition to those previously noted:

Giddings, J.L. Jr. The Forest Edge at Norton Bay, Llaska. Appeared in The Tree-Ring Bulletin, vol. 18, No. 1, p. 2-6. (Separates forwarded ONR-Washington & New York and Nav. Res. Lab., 25 February 52.)

The following reports have been prepared in addition to those previously noted:

Giddings, J. L. Jr. and Hopkins, D. M. Geologic Background of Iyatayet, Archaeological Site, Cape Denbigh, Alaska. Manuscript. (Copies forwarded ONR-Washington and New York, 12 June 52.)

Giddings, J. L. Jr. Nukleet, and Notes on Iyatayet—Sites on Cape Denbigh. Technical report. (Copies forwarded ONR-Washington and New York, 10 July 52.)

A Cooperative Study to Determine the Development Sequence in Human Culture, Vegetation, etc. in Yukon

Territory, Canada.

Investigator:

Professor Hugh M. Raup Director, Harvard Forest

Harvard University

Petersham, Massachusetts

(Cooperative project with Dr. Frederick Johnson.)

Amount from

AINA:

\$2610.

Date initiated:

1948.

Anticipated

completion date: Spring 1953.

Status:

Determination of the collections has been completed and the field data related to them collated in such a way as to form a working list. A large portion of the specimens upon which the earlier publications were based have been examined. When work on the earlier collections is completed, a combined list involving new collections will be made and a catalog of the vascular

plants prepared.

A Study of the Microfauna of Arctic Shore Areas. (Coppermine and Hudson Bay, Canada.)

Investigator:

Dr. Marie Hammer Strodam, Hillerod, Denmark

Amount from AIMA:

\$2610.

Status:

Completed.

The following reports have been received in addition to those previously noted:

Hammer, Marie. Investigations on the Microfauna of Morthern Canada, Part I, Oribatidae and A New Oribatid (Acarina) from the Rocky Mountains. Technical Report. (Manuscript copies forwarded CNR-Washington and New York, 4 April 52.)

(Because of the great number of specimens collected by this investigator, further reports are expected to appear in print for several years to come.)

The following publications have appeared in addition to those previously noted:

Hammer, Marie. Investigations on the Microfauna of Northern Canada, Part I, Oribatidae. Appeared in Acta Arctica, Fasc. IV, 1952. (Separates forwarded ONR-Washington and New York and Nav. Res. Lab., 9 July 52.)

Project: ONTR-19, 52

0

An Archaeological reconnaissance along the West Coast of Newfoundland with a view to Elucidating the Pre-

historic Cultures of Newfoundland.

Investigator:

Rimer Harp, Jr.
Dartmouth College Museum Hanover, New Hampshire

Amount

from AINA:

1200. (ONR-19)

11,00. (ONR-52)

Date initiated:

1949 (ONR-19) 1950 (ONR-52)

Anticipated

completion date: Fall 1952.

Status:

Technical report in process of preparation.

Project: ONR-21, 48

An Ethnological-Archaeological Study of the Development

of Tlingit Culture in Southeastern Alaska.

Investigator:

Prof. Frederica de Laguna

Bryn Mawr College

Bryn Mawr, Pennsylvania

Amount from AINA: \$2500. (ONR-21) \$2000. (ONR-48)

Date initiated:

1949. (ONR-21)

1950. (OMR-48)

Status:

Completed.

The following publications have appeared in addition to those previously noted:

de Laguna, Frederica. Some Dynamic Forces in Tlingit Society. Published in Southwestern Journal of Anthropology, Vol. 8, No. 1. (Separates forwarded ONR-Washington and New York and Nav. Res. Lab., 22 April 52.)

The following reports have been prepared in addition to those previously noted:

de Laguna, Frederica. Some Problems in the Relationship between Tlingit Archaeology and Ethnology. Manuscript. (Copies forwarded ONR-Washington and New York, 5 February 52.)

de Laguna, Frederica. The Story of a Tlingit Community. Technical report. (Copies forwarded CNR-Washington and New York, 10 July 52.)

A Study of the Fur Seals of the Pribilof Islands (Alaska) with Special Reference to the Behavior and Methods of Age Determination of Seals and the

Utilisation of the Carcasses.

Investigator:

Dr. G. C. L. Bertram

Director, Scott Polar Research Institute

Cambridge, England

Amount

from AIMA:

\$2500.

Date initiated:

1949.

Anticipated

completion date: Winter 1952.

Status:

Laboratory work is proceeding at Cambridge. Dr. Bertram reports work on the development of an

interesting technique in assesing age of seals from

a study of the teeth.

A Waterfowl Nesting Survey of Ungava Peninsula with Particular Reference to the Black Duck.

Investigator:

Carl R. Eklund

Fort Washington, Maryland

Amount from ATMA:

\$2500.

Date initiated:

1949.

Status:

Completed.

The following reports have been prepared in addition to those previously noted:

Eklund, Carl R. An Analysis of Waterfowl in the Interior Ungava Peninsula Based on Aerial Photographs. Technical report. (Copies forwarded ONR-Washington and New York, 19 March 52.)

Exclund, Carl R. and Polunin, N. Notes on Food Habits of the Canada Goose in the Interior of the Ungava Peninsula. Technical report. (Copies forwarded ONR-Washington and New York, 9 May 52.)

Technical report is in process of preparation.

0

A Faunistic and Ecological Exploration of the Lepidoptera,

Diptera, and Hymenoptera of Newfoundland.

Investigator:

Dr. Harry V. Krogerus Mannersheimvagen 25A Helsinki, Finland

(Cooperative project with Drs. Lindroth, ONR-30;

Palmen, ONR-33; and Tuomikoski, ONR-35.)

Amount

from AINA:

11625.

Date initiated:

1949.

Anticipated

completion date: Spring 1953.

Status:

Analysis has been determined of the collections of 300 species and 3000 specimens obtained by Dr. Krogerus in 1949 and of 30 species collected by Dr. Lindroth in 1951. Determination has continued of the Microlepidoptera of Newfoundland. The first part of the mamuscript on the Macrolepidoptera of Newfoundland should be

completed in the near future.

A Faunistic and Ecological Exploration of the Coleoptera

(especially the Carabidae) of Newfoundland.

Investigator:

Dr. Carl H. Lindroth Zoological Institute

Lund, Sweden

(Cooperative project with Drs. Krogerus, ONR-29; Palmen, ONR-33; and Tuomikoski, ONR-35.)

Amount

from AIMA:

21625.

Date initiated:

1949.

Anticipated

completion date: Spring 1953.

Status:

A series of maps illustrating the distribution of all species of Carabid beetles found in Newfoundland has been compiled. Manuscript of the report on this

work is in preparation.

Project: ONR-32, 57

A Study of the Carbohydrates and Lipids of the Invertebrates and Vertebrates of the Point Barrow Region, Alaska.

Investigator:

Dr. Xavier J. Musacchia Department of Biology St. Louis University St. Louis 4, Missouri

Amount
from AINA:

\$750. (ONR-32) \$200. (ONR-57)

Date intisted:

1949 (ONR-32) 1950 (OMR-57)

Status:

Completed.

The following reports have been prepared in addition to those previously noted:

Musacchia, X. J. The Effect of Elevated Temperatures upon the Tissue Chemistry of the Arctic Sculpin, Nyoxocephalus Quadricornis. Technical Report. (Copies forwarded OHR-Washington and New York, 3 March 52.)

Musacchia, X. J. A Study of the Lipids and Carbohydrates in Arctic Animals. Technical Report. (Copies forwarded OMR-Washington and New York, 19 June 52.)

A Faunistic and Ecological Exploration of the Diplopoda, Chilopoda, Isopoda terrestria, and in Part of the Phytophagous Coleoptera (Chryscmelidae, Curculionidae) of Newfoundland.

Investigator:

Dr. Ernst P. Palmen Zoological Institute University of Helsinki Helsinki, Finland

Amount

from AINA:

11625.

Date initiated:

1949.

Anticipated

completion date: Summer 1953.

Statua:

Technical report is in process of preparation.

The following reports have been received in addition

to those previously noted:

Palmen, Ernst. A Survey of the Diplopoda of Newfoundland. Technical report. (Copies forwarded ONR-Washing-

ton and New York, 25 June 52.)

A Waterfowl Survey of the Perry River Area of Northern Canada.

Investigator:

Paul Queneau, Peter M. Scott, Harold C. Hanson c/o Paul Queneau

1 St. John Place Westport, Connecticut

Amount

from AINA:

\$2500 .

Date initiated:

1949.

Laticipated

completion date: Summer 1952.

Status:

Technical report is in process of preparation.

The following reports have been received in addition to those previously noted:

Mills, Harlow B. and Richards, W. R. Collembola from Arctic and Boreal Canada. Pre-publication manuscript submitted to Canadian Entomologist. (Copies forwarded ONR-Washington and New York, 20 February 52.)

Levine, Norman D. Eimera Dicrostonics N. Sp., A Protozoan Parasite from Arctic Rodents. Prepublication manuscript submitted to The Illinois Academy of Science (Annual). (Copies forwarded ONR-Washington and New York, 20 February 52.)

Hanson, Harold C. A New Race of Red-backed Vole (Clethrionomys Rutilus) from the Barren Grounds of Canada. Technical report. (Copies forwarded ONR-Washington and New York, 18 April 52.)

A Floristic and Ecological Exploration of the Bryophyta of Newfoundland.

Investigator:

Dr. Risto K. Tuomikoski Botanical Institute University of Helsinki

Unionink. blu Helsinki, Finland

Amount

from AIMA:

11625.

Date initiated:

1949.

Anticipated

completion date: Winter 1952.

Status:

The determination work on the moss amberial collected in Newfoundland 1949, especially * - more critical groups, has been continued. Dr. a. rersson, Stockholm, has finished the determination suck on the gomes Bryum. Additional material of Newfoundland mosses has been received from Dr. W. Campbell Steere, Stanford University, for determination.

Project:

A Study of the Economic Geography of the Fort Yukon Area.

Investigator:

Dr. Demitri B. Shimkin Russian Research Center Harvard University Cambridge, Massachusetts

Amount

from AINA:

\$1200.

Date initiated:

1949.

Anticlpated

completion date: S

Spring 1953.

Status:

Technical report is in process of preparation.

This study was made with a view to correlating patterns of development in comparable regions of the American and Soviet Arctic. Dr. Shimkin concludes that two points of general significance should definitely be made: (1) that the problem of tuberculosis which is the fundamental cause of mortality in this area is above all an economic rather than a medical problem; and (2) with the extraordinary reproductive potential of this area any considerable reduction in death rates would cause an explosive population growth and render even more impracticable dependence upon a hunting, fishing pattern of subsistance.

0

A Study of the Peripheral Circulation in Acclimatized Eskimo Subjects on Southampton Island, Northwest

Territories, Canada.

Investigator:

Dr. Malcolm Brown

Kingston General Hospital Kingston, Ontario, Canada

Amount

from AINA:

\$500.

Date initiated:

1949.

Anticipated

completion date: Summer 1952.

Status:

Technical report is in process of preparation.

A Glaciological, Geological, and Biological Investigation of the River Clyde Region, Northeastern Baffin

Island, Canada.

Investigator:

Patrick D. Baird

Arctic Institute of North America

3485 University Street Montreal, Quebec, Canada

Amount

from AINA:

\$8000.

Date initiated:

1950.

Anticipated

completion date: Winter 1952.

Status:

Technical report is in process of preparation.

The following reports have been received in addition

to those previously noted:

Ward W. H. The Glaciological Studies of the Baffin

Island Expedition 1950, Part III, Equipment and Techniques. Technical report. (Copies forwarded

ONR-Washington and New York, 29 March 52.)

Field Population Studies of Ranunculus Species Occuring in Northern Alaska.

Investigator:

Prof. Lyman D. Benson Department of Botany Pomona College

Claremont, California

Amount

from AINA:

\$500.

Date initiated:

1950.

Anticipated

completion date: Spring 1953.

Status:

Dr. Benson is planning to return to Alaska during the summer of 1952 to complete his field population studies of the Rammouli species occuring in northern Alaska.

The following reports have been prepared in addition to those previously noted:

Benson, Lyman D. The Ranunculi of the Alaskan Coastal Plain and the Brooks Range. Technical report. (Copies forwarded ONR-Washington and New York, 24 March 52.)

A Complete Survey of the Avifauna of St. Lawrence Island, Alaska, Particularly to Study the Feeding and Nesting Habits and the Ecological Associations of the Various Species.

Investigator:

Thomas J. Cade University of Alaska College, Alaska

Status:

Completed, Spring 1951.

Additional publications and Reports:

The following publications have appeared in addition to those previously noted:

Cade, T. J. (1952) Notes on the Birds of Sledge Island, Bering Sea, Alaska. Published in Condor, Vol. 54. (Separates forwarded to ONR-Washington and New York and Nav. Res. Lab., 11 March 52.)

Archaeological, Geological, and Ethnological Investigations at Southampton Island, Northwest

Territories, Canada.

Investigator:

Dr. Edmund S. Carpenter Department of Anthropology University of Toronto Toronto, Ontario, Canada

Amount

from AINA:

\$1000.

Date initiated:

1950.

Status:

Completed.

The following reports have been prepared in addition

to those previously noted:

Carpenter, Edmund S. Time and Space in a Primitive Society. Technical report. (Copies forwarded ONR-

Washington and New York, 10 July 52.)

A Study of the Language of the Nuniwagamuit Eskimo at Nunivak Island, Alaska.

Investigator:

Prof. Louis L. Hammerich University of Copenhagen

Frue Plads

Copenhagen, Dermark

Amount

from AINA:

\$2500.

Date initiated:

1950.

Anticipated

completion date:

Spring 1953.

Status:

A technical report on the work collected in 1950 is in the course of preparation. A reproduction has been made of the picture script in use on Nunivak Island. It was found that the language of the Nunivak Eskimo was closely akin to the Kuskokwim dialect. It has some relation to southernmost subdialect of the Asiatic mainland, Cerniak, but not to the dialect of the St. Lawrence Island Eskimo.

Project:

Pollen Analysis of Peat Sections along the Alaska

ONR-50 Highway.

Investigator:

Prof. Henry P. Hansen Dean, Graduate School Oregon State College Corvallis, Oregon

Amount

from AINA:

\$500.

Date initiated:

1950.

Anticipated

completion date: Summer 1952.

Status:

Technical report is in process of preparation.

A Study of the Phytogeography, Location, and Condition of Reindeer Range and of the Management of Reindeer in Western Alaska.

Investigator:

Prof. Herbert C. Hanson Biology Department, Box 151A Catholic University of America Washington 17, D. C.

Amount from AINA:

\$7500.

Date initiated:

1950.

Status:

Completed.

The following publications have appeared in addition to those previously noted:

Hanson, Herbert C. (1951) Characteristics of Some Grassland, Marsh, and Other Plant Communities in Western Alaska. Appeared in Ecol. Mon., vol. 21, p. 317-378. (Title previously noted in 4th Semiannual Progress Report.) Separates forwarded OMR-Washington and New York, and Nav. Res. Lab., 25 February 52.

The following reports have been received in addition to those previously noted:

Hanson, Herbert C. The Importance and Development of the Reindeer Industry in Alaska. Technical report. (Copies forwarded ONR-Washington and New York, 25 Feb 52.)

Hanson, Herbert C. Vegetation Types in Northwestern Alaska. Technical report. (Copies forwarded ONR-Washington and New York, 12 May 52.)

A Study of the Hooded Seals in the Newfoundland-Labrador-Greenland Region.

Investigator:

Per Host

Norsk Kulturfilm Solplassen 1 Oslo, Norway

Amount

from AINA:

\$2500.

Date initiated:

1950.

Anticipated

completion date: Spring 1953.

Status:

Technical report is in process of preparation.

A Study of the Recent Glacier History of Glacier Bay, Alaska, and of the Development of Vegetation on Deglaciated Terrain, with Special Reference to the

Importance in the Succession.

Investigator:

Prof. Donald B. Lawrence Department of Botany University of Minnesota Minneapolis, Minnesota

Amount

from AINA:

\$1000.

Date initiated:

1950.

Anticipated

completion date: Fall 1952.

Status:

Wood samples from seven fossil trees have been prepared for radio carbon age determination and submitted to Dr. Edward S. Desvey Jr., Director of the Geochronometric Laboratory at Yale University for analysis. These trees grew in Glacier Bay and at Mendenhall Glacier

before the last major ice advance.

An Archaeological Survey from the South Mouth of the Yukon River, Alaska, to Hazen Bay, with the Excavation of the Most Promising Site Located by this Survey.

Investigator:

Wendell H. Oswalt University of Alaska College, Alaska

Amount

from AINA:

\$900.

Date initiated:

1950.

Status:

Completed:

The following publications have appeared in addition to those previously noted:

Oswalt, Wendell H. The Origin of Driftwood at Hooper Bay, Alaska. Published in Tree-Ring Bulletin, Vol. 18, No. 1. (Title noted in Fourth Semiannual Progress Report. Separates forwarded ONR-Washington and New York, and Nav. Res. Lab., 25 February 52.)

The following reports have been prepared in addition to those previously noted:

Oswalt, Wendell H. The Archaeology of Hooper Bay Village, Alaska. Technical report. (Copies forwarded ONR-Washington and New York, 10 July 52.)

An Aerial Survey of Dall Sheep in Alaska to Determine

Limits of Range, and Present Distribution and

Abundance.

Investigator:

Robert F. Scott

Wildlife Management Biologist

Fish & Wildlife Service U.S. Department of Interior

Anchorage, Alaska

Amount

from AINA:

\$1500.

Date initiated:

1950.

Status:

Completed.

The following reports have been prepared in addition

to those previously noted:

Scott, Robert F. Distribution and Abundance of Dall Sheep in Alaska. Technical report. (Copies forwarded

OMR-Washington and New York, 7 July 52.)

A Study of the Social and Economic Organisation in a Northern Market Town (Nome, Alaska) with Emphasis on the Position of the Eskimo.

Investigator:

Mrs. Dorothy Jean T. Thompson

1603 Tremont Street Cedar Falls, Iowa

Amount

from AINA:

\$900.

Date initiated:

1950.

Status:

Completed.

The following reports have been prepared in addition

to those previously noted:

Thompson, D.J.T. The Social and Economic Organisation in a Northern Market Town (Nome, Alaska) with Emphasis

on the Position of the Eskimo. Technical report.

(Copies forwarded ONR-Washington and New York, 21 May 52.)

A Study of the Lichens of the West Coast of Hudson Bay, Their Ecology, Distribution and Abundance.

Investigators

Prof. John W. Thomson, Jr. Department of Botany University of Wisconsin Madison, Wisconsin

Amount

from ATMA:

\$500.

Date initiated:

1950.

Status:

Completed.

The following reports have been prepared in addition to those previously noted:

Thomson, J.W. Lichens of Arctic America. Technical report. (Copies forwarded OMR-Washington and New York, 31 March 52.)

()

(0)

A Laboratory Analysis of Representative Plants from the Vicinity of Point Barrow, Alaska, with the View to Determining their Content of Vitamins, Including Ascorbic Acid, Thiamine, Riboflavin and Niacin.

Investigator:

Dr. Felix G. Gustafson Department of Botany University of Michigan Ann Arbor, Michigan

Amount
from AINAx*

\$2000.

Date initiated:

1951.

-- Anticipated completion date:

Spring 1953.

Status:

Technical report is in process of preparation.

The plant material collected at Point Barrow, Alaska, August-September 1951, has been analysed for the vitamins riboflavin, thiamine and niacin. Analysis for ascorbic acid and some reanalysis of riboflavin is to be done. It has been found that the thiamine content is low, but both riboflavin and niacin are, on the other hand, quite high and not essentially different from some of our cultivated plants. The variation among the species is extensive, but this is to be expected as plants of great taxonomic difference are used.

An Ecological and Distributional Study of Vertebrates and Invertebrates of Ungava-Labrador.

Investigator:

Dale J. Osborn

Department of Zoology McGill University

Montreal, Quebec, Canada

Amount

from AINA:

\$1300.

Date initiated:

1951.

Anticipated

completion date: Spring 1953.

Status:

Some progress has been made in sorting and counting the soil invertebrate collections. All plant material has been identified and work has begun on the classification of the various plant communities from which animal material was obtained.

A Geographical-Geological Study of Lake George and Other Ice-dammed Lakes of Alaska, with the View to Determining their Physical Characteristics and Cultural Significance.

Investigator:

Dr. Kirk H. Stone Department of Geography University of Wisconsin Madison, Wisconsin

Amount
from ATMA:

321110.

Date initiated:

1951.

Anticipated

completion date: Spring 1953.

Status:

Work has been divided between: 1) preparation of a base map of Lake George, Alaska, 2) continuation of observation at Lake George through the winter, 3) preparation to enlist aid for observations of Misina Lake and Lake Barkley in the Chitina River Basin, and 4) continuation of search for literature or observations on ice-dammed lakes elsewhere in the world.

A Paleobotanical-Stratigraphical Study of the "Muck" Deposits of the Klondike District, Yukon Territory, with the View to Collecting Evidence on Glacial and Postglacial Climatic Sequences.

Investigator:

John D. Campbell
Department of Botany
McGill University
Montreal, Quebec, Canada

Amount

from AINA:

\$1500.

Date initiated:

1951.

Anticipated

completion date: Fall 1952.

Status:

Technical report is in process of preparation.

An Archaeological Study of Mill Island, Hudson Strait, Including Detailed Excavation of a Pure Cape Dorset

Eskimo House Site.

Investigator:

Dr. Deric O'Bryan

Arctic, Desert and Tropic Information Center Research Studies Institute Maxwell Air Force Base, Alabama

Amount

from AINA:

\$5700.

Date initiated:

1951.

Anticipated

completion date: Spring 1953.

Status:

The following reports have been prepared in addition to those previously noted:

O'Bryan, Deric. Research in Hudson's Strait, 1951. Submitted for publication to Arctic Circular. (Copies forwarded OMR-Washington and New York, 26 February 52.)

O'Bryan, Deric. Excavation of a Cape Dorset Eskimo House Site, Mill Island, West Hudson's Strait. Technical report. (Copies forwarded CMR-Washington and New York, 25 April 52.)

An Archaeological Reconnaissance of the Brooks Range, Alaska, with the View to Locating Archaeological Sites Containing Implements of the Denbigh Flint Complex.

Investigator:

William Irving University of Alaska College, Alaska

Amount from AINA:

\$1000.

Date initiated:

1951.

Anticipated

completion date: Spring 1953.

Status:

Field work in the summer of 1951 resulted in evidence that the Brooks Range has supported a variety of aboriginal people over a long period of time. One of the sites was found to be comparable with the oldest material. Some of the material collected is related to the early flint industries and may well fit into a supposed typological progression from the Denbigh Flint Complex to Ipiutak. Analysis of the material is proceeding. Much of it including that from the only site which produced a significant quantity of artifacts representing a single culture phase (Imaigenik II) has not yet been definitely classified.

The following reports have been prepared in addition to those previously noted:

Irving, William. An Archaeological Reconnaissance in the Brooks Range. Technical report. (Copies forwarded ONR-Washington and New York, 5 February 52.)

A Botanical Survey of Ungava-Labrador between the Mouth of the Korok River and the Torngat Mountains.

Investigator:

Dr. Jacques Rousseau Montreal Botanical Garden 1101 Sherbrooke Street E. Montreal, Quebec, Canada

Amount

from AINA:

\$1300.

Date initiated:

1951.

Anticipated

completion date: Spring 1953.

Status:

During the field season of 1951 in northern Ungava and Labrador, there was accumulated material which represents an exhaustive botanical collection of the territory surveyed. Work is proceeding on taxonomical results for special papers and on the preparation of a monograph in relation to this survey.

An Ecological Study of Fresh Water Algae of Arctic and Subarctic Alaska.

Investigator:

Dr. Hannah T. Croasdale Department of Zoology Dartmouth College Hanover, New Hampshire

Amount from AINA:

\$2000.

Date initiated:

1951.

Anticipated

completion date: Spring 1953.

Status:

Progress has continued in the examination of specimens collected during the summer of 1951. A check list has been prepared of fresh water algae reported from Alaska and a bibliography assembled on Arctic algae in general. Dr. W. C. Steere of Stanford has reported the collection of mosses turned over to him were in excellent condition and appeared promising.

A Geological Study of Canyon Fiord, Ellesmere Island.

Investigator:

Dr. Johannes C. Troelsen

Universitetets Mineralogiske Museum

Ostervoldgade 7 Copenhagen K, Denmark

Amount

from AINA:

11000.

Date initiated:

Summer 1952.

Status:

Preparations for field work during the summer were made by sled trip across Forsheim Peninsula to cache supplies and equipment. From the base at Eureka, a second trip around the coast of the peninsula has been undertaken. The project has particular reference to the geological history of the Franklinian Geosyncline.

The Blue Goose, Life History, Ecology and Management.

Investigator:

Mr. F. Graham Cooch

Department of Conservation

Cornell University Ithaca, New York

Amount

from AINA:

\$2000.

Date initiated:

Summer 1952.

Status:

In this project an effort will be made to band a large sample of Blue Geese in order to determine migration routes in Hudson Bay and to the southward, but greatest attention will be focused on summer breeding grounds.

Growth Rates of Marine Invertebrates as a Function of Latitude.

Investigator:

Mr. Paul A. Dehnel Department of Zoology University of California Los Angeles, California

Amount

from AINA:

\$1500.

Date initiated:

Summer 1952.

Status:

This study proposes to determine whether growth rate in the same species of coldblooded key-industry animals varies as a simple function of temperature in nature or is regulated as metabolism in acclimating species.

The Life History of the Pacific Walrus.

Investigator:

Mr. Francis H. Fay

Department of Zoology University of British Columbia Vancouver, B.C., Canada

Amount

from AINA:

1500.

Date initiated:

Summer 1952.

Status:

Field work will consist of accompanying Eskimo hunters at various places along the coast between Gambell and Pt. Barrow, to examine walrus carcasses and make collections of such parts of the anatomy (ovaries, testes, etc.) as may be needed for later examination in the

laboratory.

Adoption of Sheep Farming by Greenlandic Seal Hunters.

Investigator:

Miss Marjorie C. Findlay

Kauppakatu 23 Kajaani, Finland

Amount

from AINA:

\$1200.

Date initiated:

Summer 1952.

Status:

This project is an investigation of the adoption of sheep farming and horticulture by the seal hunting Eskimos on the southwest coast of Greenland, with a view to elucidating aspects of culture contact and

culture change.

Pleistocene and Postglacial Forests in Alaska and

Western Canada.

4: 1

Investigator:

Dean Henry P. Hansen

Graduate School Oregon State College Corvallis, Oregon

Amount

from AINA:

\$500.

Date initiated:

Summer 1952.

Status:

A pollen analysis of peat and mulch deposits is planned to determine record of Pleistocene and post-glacial forests, in order to interpret climate and

forest migrations.

The Arctic and Subarctic Muscidae of North America.

Investigator:

Mr. Hugh C. Huckett

Long Island Vegetable Research Farm

Riverhead, New York

Amount

from AINA:

\$1700.

Date initiated:

Summer 1952.

Statue:

It is proposed to assemble and classify the flies belonging to the muscid fauna in the Arctic and subarctic regions of North America which have accumulated in the collections of the Mational Museum in Washington

and in the National Collection in Ottawa.

Summer Behavior and Ecology of Certain Sea-ducks.

Investigator:

Philip S. Humphrey University of Michigan Museum of Zoology Ann Arbor, Michigan

Amount

from AIMA:

\$1800.

Date initiated:

1952.

Status:

Collections of specimens will be made in Houper Bay, Alaska, during the wildfowl migration. Later in Igiak Bay, Alaska, a study will be made of the nesting ecology and behavior of those species of sea-ducks resident there.

Project: OMR-82

Aleutian Anthropology.

Investigator:

Dr. William S. Laughlin Department of Anthropology University of Oregon Eugene, Oregon

Amount from AINA:

\$3000.

Date initiated:

Summer 1952.

Status:

Anthropological research in the Aleutian Islands will be done by a party composed of 7 experienced investigators. Primary base of operations will be on Umaak Island. It is proposed to excavate only those sites which will yield stratigraphic evidence of cultural sequence from Paleo-Aleut through Neo-Aleut occupation, and to determine if the Aleutian core and blade industry preceded or attended the earliest Paleo-Aleut people; to acquire skeletal collections; to study the language and culture of the Aleuts.

Botanical Researches in James Bay, Canada.

Investigators

Rev. Ernest Lepage Ecole d'Agriculture Rimouski, P. Q., Canada

Amount

from AINA:

\$600.

Date initiated:

Summer 1952.

Status:

Objective is a botanical inventory to find new entities in the vascular and invascular flora and to determine the range of known plants in the region of Albany River and adjacent coast of James Bay. Project:

Studies of the Non-material Culture of the Nostak

5 Eskimo,

Investigator:

Charles V. Lucier

Box 37

College, Alaska

Amount .

from AIMA:

\$1250.

Date initiated:

Summer 1952.

Status:

This study is to cover the period of white contact. Transcription of myths and ceremonies and pre-

Christian religious beliefs to be obtained from the

oldest age group.

Claciological Research in Alaska.

Investigator:

Maynard M. Miller 77 Holbrook Road Cambridge, England

Amount

from AIMA:

\$700.

Date initiated:

Summer 1952.

Status:

This project will continue previous studies of englacial ice structures, snow and ice surface ablation, temperature and radiation records in conjunction with melt-water runoff analysis in the Juneau Ice Field.

A Floristic Survey of Northwestern Ontario.

Investigator:

David R. Moir

Department of Botany University of Minnesota Minneapolis, Minnesota

Amount

from AINA:

11500.

Date initiated:

Summer 1952.

Status:

It is planned to collect plant specimens and related data at a series of selected stations along the Fawn and Severn Rivers, Canada, between Big Trout Lake and Fort Severn on the Hudson Bay Coast.

Project:

Archaeological Reconnaissance of Nunivak Island,

ONR-88 Alaska.

Investigator:

James W. Van Stone

Department of Anthropology

University of Alaska College, Alaska

Amount

from AINA:

11500.

Date initiated:

Summer 1952.

Status:

During the summer of 1952 the work will be confined to locating and testing different sites in order that the most promising ones may be selected for complete

excavation.

A Study of the Lower Course of the Saskatchewan Glacier,

Alberta, Canada.

Investigator:

Robert P. Sharp

California Institute of Technology

Pasadena 4, California

Amount

from AINA:

\$1500.

Date initiated:

Summer 1952.

Status:

A thorough study is planned of the lower course of the glacier as to its physical condition, rate and mode of flowage and nature and origin of structures in the ice produced by flowage.

CONTRACT N7onr-367, TASK ORDER II

Project: ONR-T.O. 2a

()

Compilation of a Comprehensive Annotated Bibliography

on the Arctic.

Investigators

Arctic Institute of North America (Project Director - Marie Tremaine)

Amount

from AINA:

(Task Order II)

Anticipated

completion date:

Initial phase completed June 1951. Supplement in process of preparation.

Status:

Bibliographic data for 5 volumes is in type and proof reading is in progress. Research has continued on material for the First Supplement and editorial work is in process of preparation for printing this supplement.

CONTRACT Nonr-342-00

Project: Nonr-342-00

 \mathbf{O}

A Reconnaissance Oceanographic Investigation in the

Coastal Waters of Labrador.

Investigator:

Commander David C. Nutt (USNR)

Arctic Specialist Dartmouth College Hanover, New Hampshire

Amount

from AINA:

(Contract Nonr-342-00).

Date initiated:

1951.

Anticipated

completion date: Spring 1953.

Status:

In the summer of 1952 field work will continue in the Hamilton Inlet - Lake Melville Estuary with a secondary center of study in the area between Nani and Saglek Bay.

The following reports have been prepared in addition to those previously noted:

Nutt, David C. Blue Dolphin Labrador Expedition, Winter Project, 1952. Technical report, 15 April 52. (Copies forwarded ONR-Washington and New York, 12 May 52.)

Butcher, W. S. Bottom Sediments and Foramenifera from Labrador, Blue Dolphin, 1951. Technical report. (Copies forwarded OMR-Washington and New York, 27 May 52.)

INDEX	
Investigator	Project Designation
Contract N7onr-367, Task Order I	
Baird, Patrick D.	43
Benson, Lyman D.	गिर्ग
Bertram, G. C. L.	24
Brown, Malcolm	42
*Cade, Tom J.	46
Campbell, John D.	68
*Carpenter, Edmand S.	47
Cooch, F. Graham	75 22
Croasdale, Hannah T.	72
Dehnel, Paul A.	76
*de Laguna, Frederica	21, 48
Mclund, Carl R.	26
Fay, Francis H.	77
Findlay, Marjorie C.	78
#Giddings, J. L. Jr.	13, 20
Gustafson, Felix G.	65
*Hammer, Marie	16
Hammerich, Louis L.	49
Hansen, Henry P.	50 and 79
Hanson, Harold C.	34
#Hanson, Herbert C.	51 19, 52
Herp, Klmer Jr.	53
Host, Per Huckett, Hugh C.	80
Humphrey, Philip S.	81
Irving, William	70
Krogerus, Harry V.	29
Larsen, Helge	n
Laughlin, William S.	82
Lawrence, Donald B.	56
Lepage, Ernest	83
Lindroth, Carl H.	30 9 c
Lucier, Charles V.	85
Miller, Maynard M.	86
Moir, Edwid R.	87
*Musacchia, Xavier J.	32, 57

^{*} Completed project.

INDEX (page 2)

Investigator	Project Designation	
Contract N7onr-367, T.G. I (Con't	.)	
O'Bryan, Deric	69	
Osborn, Dale J.	66	
#Oswalt, Wendell H.	59	
Palmen, Ernst P.	33	
Queneau, Paul	34	
Raup, Hugh M.	14	
Rousseau, Jacques	71	
Scott, Peter M.	34	
*Scott, Robert F.	60	
Sharp, Robert P.	89	
Shimkin, Demitri B.	37	
Stone, Kirk H.	67	
Thompson, Dorothy Jean T.	62	
*Theseon, John W. Jr.	63	
Troelsen, Johannes C.	73	
Tuomikoski, Risto K.	35	
Van Stone, James W.	88	
Contract N7onr-367, Task Order II	1	
Arctic Institute (Marie Tremaine)	ONR-T.O. 2a	
Contract Nonr-342-00		
Nutt, David C.	Nonr-31/2-00	

^{*} Completed project.